

CAT. No. FLR-02-2010

# ISOFLO

## Self – Levelling Cementitious Compound

**ISOFLO** is a self-leveling, free flowing, pumpable cementitious floor compound consisting of a special blend of hydraulic binders, fillers, polymers and flow control agent. **ISOFLO** is specially designed for floor underlayment for various floor finishes and repair/ resurfacing of old., worn cement-bound substrate.

### APPLICATIONS

**ISOFLO** is used mainly for leveling uneven concrete floors whether in-situ or precast. It is used as a repair or leveling course over interior, sound concrete surface at thickness from featheredge to 10mm.

### ADVANTAGES

- Self-leveling and free flowing consistency ensures smooth, level and even surface.
- Requires only the addition of water. Polymer-enhanced, excellent mechanical strength and bond to substrate.
- Fast-hardening, floor finishes such as vinyl, marble, linoleum, ceramic, rubber sheets, wood parquette and carpets can be applied after 24 hours.
- Can be extended with fine aggregate for thicker applications (see note)
- Minimal shrinkage. More crack-resistant.

### TYPICAL PROPERTIES

1. Compressive strength 50 x 50 mm cube (ASTM C 109)	30 N/ sq.mm at 28 days.
2. Bond strength (ASTM C- 1583)	+1 N/ sq.mm at 28 days
3. Length change (ASTM C 1570)	Nil
4. Recommended Thickness	
Neat	0-5mm
Extended	5-10 mm

### DIRECTIONS FOR USE

#### SURFACE PREPARATION

Surface must be sound, clean and free from dust, oil, grease, curing compounds, coatings and other foreign matter. New concrete should be at least 14 day old. Laitance should be removed using DISSOLVENT IS. Oil and light grease deposits should be removed using DEGRIS chemical degreaser. Wash surface liberally with clean wter while brushing with a stiff-bristled nylon brush.

Air sweep using oil-free compressed air. Cracks should be repaired with **ISOFLO** blended with equal proportion of sand and sufficient water to produce a plastic, workable consistency (allow repair to dry for at least 2 hours).

After surface preparation, saturate the surface with water to prevent rapid moisture loss at least one hour prior to leveling. Any excess, free-standing water should be removed just prior to leveling.

#### PRIMING

Priming is not necessary as **ISOFLO** has excellent bond to damp substrate. However, for applications where water saturation is not desired and when substrate is old and porous, prepare polymer bonding slurry by mixing 2.5 parts ordinary Portland cement, 1 part ISOFIX, and 1 part water by volume. The resultant slurry is then applied over the substrate using a stiff-bristled broom and allowed to dry.

#### MIXING

**Note:** One bag of **ISOFLO** will require approximately 9 to 9.5 liters of cool clean water. First put three-fourths of the required amount of water into a suitable mixing container.

Next, slowly add powder while simultaneously mixing with a slow speed drill fitted with paddle (200—300 RPM). Mix until smooth with no lumps. Add the remaining water and mix further for 3-5 minutes until a smooth, pourable, self leveling mix is obtained. Apply immediately.

**Extended:** To one bag of **ISOFLO**, up to 12.5 kilogram of ASTM C 33 fine sand can be added (alternatively, use ISOLA aggregate number 3). This will require approximately 10-10.5 liters of water. Follow mixing procedure as detailed in Neat.

## PLACING

Pour the material on the substrate and spread by trowel or pin screed to the desired thickness. Immediately after leveling, roll the surface with a nylon spiked roller. Roll with aio back and forth motion to remove any entrapped air and trowel marks. Do not float the surface when it has started to set (see note). Allow to dry for at least 24 hours before installing final floor finish. Do not cure with water.

## NOTES

1. The self-levelling, free-flowing action of **ISOFLO** last for approximately 15 minutes at 35° C. Do not mix more material than can be reasonably applied with 15 minutes. Spike rolling can be carried out as a knife cut in the surface heals within 1 minute.
2. Mixing, placing and spreading should be a continuous process to obtain the best possible result. The required thickness should be achieved in one application. When leveling big areas, it is advisable to use spiked shoes for a much faster, trouble free application.
3. **ISOFLO** will start to harden 25 to 40 minutes after mixing. Do not float nor spike roll the surface once hardening sets in. DO NOT ADD water to restore plasticity and / or flowing property.
4. **ISOFLO** should not be used as a heavy duty wearing surface.
5. When installing over slab on grade, water vapor barrier should be installed at the subbase.
6. The highest point in the placement area will determine thickness.
7. **ISOFLO** should not span over joints. Joints in the floor slab should be designed and installed in accordance with generally accepted practice such as those recommended in the ACCI. Always provide isolation joints where **ISOFLO** adjoins columns and walls.

## CLEANING

All tools and mixing equipment should be cleaned with water immediately after use.

## HEALTH / SAFETY

**ISOFLO** is non-toxic but mildly alkaline. Use dust mask and hand gloves when using this product. Skin and eye contamination should be immediately washed with water.

## STORAGE

Store as in cement in dry, warehouse condition.

## PACKING/ COVERAGE

**ISOFLO** is packed in 25 kg plastic bag. Theoretical coverages are as follows:

**Neat:** 19.6 liters / 9.8 sq.m at 2mm thick.

**Extended:** 26.6 liters/ 2.66 sq. meters at 10mm thick.

Revised: 15.01.2023

Technical information, data are to be considered as typical values and not sales specification. Actual measured values may vary due to factors beyond our control. Indications concerning function and application of the products are empirical. Although the information is believed to be accurate, there is no warranty by ISOLA. None of the recommendations becomes part of the warranted quality of the products. Due to the fact that the conditions of individual use are beyond ISOLA's direct and continuous control, ISOLA disclaims all responsibility in connection with the use of its products and does not warrant against any loss direct or consequential

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